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| APPLICATION NO.   | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------------------|----------------------|---------------------|------------------|
| 10/783,287  | 02/20/2004                        | Ricardo Te Lim       | VP113               | 7613             |
| 20178<br>EPSON RESEA  | 7590 04/24/200<br>ARCH AND DEVELO | EXAMINER             |                     |                  |
| INTELLECTUAL PROPERTY DEPT<br>2580 ORCHARD PARKWAY, SUITE 225 |                                   |                      | HASSAN, AURANGZEB   |                  |
| SAN JOSE, CA  |                                   | E 223                | ART UNIT            | PAPER NUMBER     |
| ·   |                                   |                      | 2182                |                  |
|   |                                   |                      |                     |                  |
| SHORTENED STATUTOR  | Y PERIOD OF RESPONSE              | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS  |                                   | 04/24/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.   | Applicant(s)  |  |  |  |
|--|---|---|--|--|--|
| •  | 10/783,287  | LIM ET AL.  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |
|  | Aurangzeb Hassan  | 2182  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONEI | I. ely filed the mailing date of this communication. O (35 U.S.C. § 133). |  |  |  |
| Status   |   | •   |  |  |  |
|  | Responsive to communication(s) filed on <u>29 January 2007</u> .  |   |  |  |  |
| ·=   | ,—  |   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |   |  |  |  |
| Disposition of Claims  | •   |   |  |  |  |
| 4) ⊠ Claim(s) <u>1-20</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-20</u> is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or   |   |   |  |  |  |
| Application Papers   |   |   |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |   |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |   |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |   |  |  |  |
| Attachment(c)  |   |   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 3/1/07 & 3/15/07.   | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:  | te  |  |  |  |

Art Unit: 2182

#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/29/2007 has been entered.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Goodwin et al. (US Patent Number 5,371,870 hereinafter "Goodwin").
- 4. As per claims 1, 5, 9, and 13, Goodwin teaches a method, apparatus, medium, and system comprising: receiving a plurality of requests, each of the plurality of requests specifying one address in a range of multiple addresses (memory requests by CPU for sequential locations within a range, column 4, lines 3 38);

Application/Control Number: 10/783,287 Page 3

Art Unit: 2182

determining if an address corresponding with one of the plurality of requests is within the range of multiple addresses (it is determined whether the memory references are available in the buffer and then checked from the memory, it is already set that the request is within the range of address, column 4, lines 39 - 67, column 5, lines 1 - 8); and

causing a memory to be accessed whenever an address corresponding with a request is within the range of multiple addresses, the memory being identified by and accessible only through a single address, whereby the memory is accessed using any one of the addresses in the range of multiple addresses (memory requests CPU are granted access via a single access as shown in figure 2, column 5, lines 9-61).

- 5. As per claims 2, 6 and 10 Goodwin teaches a method, apparatus, medium, and system further comprising sending the plurality of request in a sequence, wherein the address corresponding with each successive request in the sequence is a successive address in the range of multiple addresses (when subsequent request corresponds to a sequential address deemed a stream, column 4, lines 3 38).
- 6. As per claims 3, 4, 7, 8, 11, 12, 15 and 16 Goodwin teaches a method, apparatus, medium and system wherein the memory access includes reading from the memory and writing to the memory (read and write requests seen in figure 2).

Art Unit: 2182

7. As per claim 14, 17, 18 and 20, Goodwin teaches a method and device wherein the memory is a first-in-first-out memory (FIFO, column 2, lines 47 - 67).

8. As per claim 19, Goodwin teaches an apparatus wherein the range of multiple addresses is predetermined (the range of addresses is set as predetermined by the maximum available addressing limited by the main memory, element 12, figure 1 and validation is expressed in figure 7).

# Response to Arguments

9. Applicant's arguments with respect to claims 1 – 20 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/783,287

Art Unit: 2182

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH

KIM HUYNH SUPERVISORY PATENT EXAMINED

4/16/07